TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No. 55216

Re Application Of: **Steven T. Adamy**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/749,685	December 31, 2003	Reis, Travis M.	45980	2859	2168

Invention: **Timing Device**

COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:
April 18, 2007

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Phillip R Kiefer
Signature

Dated: **June 11, 2007**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Steven T. Adamy	Art Unit: 2859
Serial No: 10/749,685	Examiner: Reis, Travis M.
Filing Date: December 31, 2003	
Title: Timing Device	Atty. Docket No.: 55216

APPEAL BRIEF

Commissioner of Patents
and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal from the Final Rejection dated January 23, 2007.

REAL PARTY IN INTEREST

The real party in interest of this application is Church & Dwight.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF THE CLAIMS

Claims 1-8 are currently pending in this application. Claims 1-8 have been finally rejected and are the subject of this appeal.

STATUS OF AMENDMENTS

Appellant have made no amendments since the Final Action was mailed. Appellant filed a Response to the Final Office Action on February 16, 2007. The Response was entered and an Advisory Action issued on March 27, 2007.

SUMMARY OF CLAIMED SUBJECT MATTER

As set forth in independent claim 1, the presently claimed application is directed to a timing device for visually determining the passage of a preselected period of time comprising: a redox indicator deposed within a matrix and in combination with a reactable metal ion, said matrix being exposable to air such that over a period of time during exposure to air, the redox indicator changes color and thereby indicates the passage of a predetermined period of time.

Support for this claim can be found, *inter alia*, in Appellant's specification and in claim 1, as originally filed. Specifically, support for "a timing device for visually determining the passage of a preselected period of time," "a redox indicator," and "in combination with a reactable metal ion," can be found at page 4, lines 9-13. Support for "a matrix," and "exposable to air such that over a period of time during exposure to air, the redox indicator changes color" can be found at page 5, lines 2-4, and lines 16-17.

As set forth in independent claim 8, the presently claimed invention is directed to a method for determining when a consumer product has reached an end to its useful

shelflife comprising: preparing a timing device comprising a redox indicator deposed within a matrix which also contains a reactable metal ion, said matrix being exposable to air; attaching the timing device to an outside surface of the consumer product; observing the timing device for color changes, which color changes coincide with the end of the useful shelflife of the said consumer product.

Support for this claim can be found, *inter alia*, in Appellant's specification and in claim 8, as originally filed. Support for "a method for determining when a consumer product has reached an end to its useful shelflife," "attaching the timing device to an outside surface of the consumer product," and "color changes coincide with the end of the useful shelflife" can be found at page 4, lines 1-7. Support for "a timing device comprising a redox indicator deposed within a matrix which also contains a reactable metal ion," and "said matrix being exposable to air," can be found at page 4, lines 9-13 and page 5, lines 2-4 and 16-17.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellant raises the following issue on appeal:

(1) Whether finally rejected claims 1-4 and 6-8 have been properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Montalto et al. (U.S. Pat. No. 3,542,519) in view of Preziosi et al. (U.S. Pat. No. 4,788,151); and

(2) Whether finally rejected claim 5 has been properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Montalto et al. (U.S. Pat. No. 3,542,519) and Preziosi et al. (U.S. Pat. No. 4,788,151), and further in view of Anderson (U.S. Pat. Appl. Pub. No. 2005/0078557).

ARGUMENT

(1) The Examiner has finally rejected claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as being unpatentable over Montalto et al. (U.S. Pat. No. 3,542,519) in view of Preziosi et al. (U.S. Pat. No. 4,788,151). Appellant traverses this rejection.

Appellant respectfully asserts that Montalto et al. does not disclose all the claim limitations of the presently claimed invention. Currently pending claim 1 is directed to, "[a] timing device for visually determining the passage of a preselected period of time comprising: a redox indicator deposed within a matrix and **in combination with a reactable metal ion**, said matrix being exposable to air such that over a period of time during exposure to air, the redox indicator changes color and thereby indicates the passage of a predetermined period of time." See claim 1 (emphasis added). Furthermore, according to Appellant's disclosure, "[a] redox couple may be formed between a redox indicator and another material, such as a metal ion." See Appellant's specification at page 4, second paragraph. As such, it is clear that the claims of the present invention are directed to a timing device which combines a redox indicator **and** a reactable metal ion. Claim 8 is directed to "[a] method for determining when a consumer product has reached an end to its useful shelflife... [wherein] a timing device comprising a redox indicator deposed within a matrix which also contains a reactable metal ion." See claim 8 (emphasis added). Thus, like claim 1, claim 8 is also directed to a timing device which combines a redox indicator and a reactable metal ion.

Montalto et al. is directed to "a time passage indicator for instruments." See Montalto et al. at column 1, lines 68-69. According to the Examiner, Montalto et al. discloses "the use of metal ions in redox indicators to aid in oxidation." See Office Action dated January 23, 2007, at page 2, second paragraph of section 3. Appellant strenuously disagrees with this contention. There is simply no indication whatsoever

in Montalto et al. that the disclosed time indicator comprises **both** a redox indicator and a reactable metal ion. According to Montalto et al., "[i]n general, redox indicators with normal oxidation potentials of +0.76 volt or smaller are useful. The normal potential is expressed with reference to the potential of the normal hydrogen electrode. As thus expressed, the ferrous-ferric ion couple has a normal oxidation potential of +0.76." See Montalto et al. at col. 5, lines 38-43 (emphasis added). Appellant respectfully points out that this brief disclosure of a ferrous-ferric ion couple in Montalto et al. is simply meant to exemplify the volt potential of useful redox indicators. In fact, there is no other disclosure in Montalto et al. of metal ions and no mention whatsoever of a redox indicator and a reactable metal ion. Montalto et al. goes on to list useful redox indicators at col. 5, lines 44-53. None of these listed useful redox indicators comprises a redox indicator **and** a reactable metal ion, and there is no indication that these redox indicators can be combined with a reactable metal ion. Importantly, none of the examples of Montalto et al. combine the use of a redox indicator **and** a reactable metal ion.

According to the Examiner, Montalto et al. does not disclose the use of tin metal ions. See Office Action dated January 23, 2007 at page 2, section 3. The Examiner has cited Preziosi et al. to overcome this deficiency. Preziosi et al. is directed to "[a]cetylenic complexes... that are useful as environmental indicating materials." See the Abstract of Preziosi et al. As the Examiner points out, Preziosi et al. discloses the use of metal ions which complex with the acetylenic compound." See Office Action dated January 23, 2007, at page 2, second paragraph of section 3; see also Preziosi et al. at sol. 3, lines 11-30. However, while Preziosi et al. does teach the use of various metals (See Preziosi et al. col. 3, lines 11-31), Preziosi et al. does not suggest the use of these metals in combination with a redox indicator, as presently

claimed by Appellant. According to Appellant's specification, the redox indicator and metal ion form a redox couple. See Specification at page 4, second paragraph. Whereas, according to Preziosi et al., "the effective complexing metals of the present invention are those whose cations complex with the acetylenic compound." See Preziosi et al., col. 3, lines 12-14.

There is simply no reason to combine Preziosi et al. with Montalto et al. Montalto et al. does not disclose acetylenic compounds or their use as redox indicators. In fact, the Examiner has given no indication why one of skill in the art would combine these references. As Appellant has demonstrated hereinabove, Montalto et al. does not disclose the combination of a reactable metal ion and a redox indicator, as presently claimed. Preziosi et al. discloses the use of metal ions as complexing agents, however, Preziosi et al. does not disclose or suggest the use of a redox indicator whatsoever. There is no suggestion that the acetylenic compound of Preziosi et al. is in anyway analogous to the redox indicator presently claimed or the redox indicator of Montalto et al. There is also no suggestion that the metal ions disclosed in Preziosi et al. can be useful in combination with a redox indicator.

As such, it is Appellant's position that one of skill in the art would not combine the metal ions disclosed in Preziosi et al. with the redox indicator of Montalto et al. Appellant respectfully asserts that one of skill in the art would not look to add a metal complexing agent for acetylenic compounds as disclosed in Preziosi et al. to improve a redox indicator as disclosed in Montalto et al. There is simply no desire in the art for such a combination. Appellant respectfully asserts that prior to Appellant's invention, there was no desire to combine a reactable metal ion with a redox indicator in a timing device.

As such, Appellant respectfully asserts that the combination of Montalto et al. and Preziosi et al. does not and cannot render claims 1 or 8 obvious. Claims 2-4 and 6-7, which depend either directly or indirectly from claim 1 are likewise not rendered obvious by the combination of Montalto et al. and Preziozi et al.

Appellant respectfully requests reversal of this rejection.

(2) The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Montalto et al. (U.S. Pat. No. 3,542,519) and Preziosi et al. (U.S. Pat. No. 4,788,151), and further in view of Anderson (U.S. Pat. Appl. Pub. No. 2005/0078557).

As Appellant demonstrated hereinabove, the combination of Montalto et al. and Preziosi et al. does not render the presently claimed invention obvious. Specifically, neither Montalto et al. or Preziosi et al. nor the combination of Montalto et al. with Preziosi et al. disclose or suggest the combination of a redox indicator **and** a reactable metal ion in a timing device.

According to the Examiner, the combination of Montalto et al. and Preziosi et al. does not disclose, "wherein the matrix is attached to an adhesive tape." See Office Action at page 3, section 4; see also claim 5, as presently pending. Appellant agrees. The Examiner has cited Andersen to overcome this deficiency. Specifically, the Examiner states that, "it would have been obvious to one of ordinary skill... to add the adhesive disclosed by Andersen to the indicator disclosed by Montalto et al." See Final Office Action dated January 23, 2007, at page 3, second to last paragraph. However, Appellant respectfully points out that Andersen does not teach or suggest the combination of a redox indicator and a reactable metal ion whatsoever. In fact, Andersen does not disclose either a redox indicator or a reactable metal ion. Moreover, like Montalto et al. and Preziosi et al., Andersen does not teach or suggest the combination of a redox indicator and a reactable metal ion whatsoever. Again, it

is Appellant's position that one of skill in the art would not combine the metal ions disclosed in Preziosi et al. with the redox indicator of Montalto et al. Andersen does not overcome this deficiency. Appellant respectfully asserts that one of skill in the art would not look to acetylenic compounds to improve a redox indicator. There is simply no indication in the art for such a combination. As such, Appellant respectfully asserts that prior to Appellant's invention, there was no desire to combine a reactable metal ion with a redox indicator.

Appellant asserts that the combination of Montalto et al., Preziosi et al. and Andersen cannot and does not render claim 5 obvious. Appellant respectfully requests reversal this rejection.

CONCLUSIONS

Appellant respectfully asserts that the combination of Montalto et al. and Preziosi et al. is improper. More specifically, it is Appellant's position that one of skill in the art would not combine the metal ions disclosed in Preziosi et al. with the redox indicator of Montalto et al. One of skill in the art would not look to acetylenic compounds to improve a redox indicator. Again, Appellant respectfully asserts that prior to Appellant's invention, there was no desire to combine a reactable metal ion with a redox indicator. Andersen does not overcome this deficiency. Reconsideration and reversal of all of the Examiner's rejections are respectfully requested.

Respectfully submitted,

6-11-2007
Date

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CLAIMS APPENDIX

1. (Previously Amended) A timing device for visually determining the passage of a preselected period of time comprising:

   a redox indicator deposed within a matrix and in combination with a reactable metal ion, said matrix being exposable to air such that over a period of time during exposure to air, the redox indicator changes color and thereby indicates the passage of a predetermined period of time.

2. (Original) The timing device of Claim 1 wherein the matrix is a film-forming polymer.

3. (Previously Amended) The timing device of Claim 2 wherein the film-forming polymer is a cellulose derivative.

4. (Previously Amended) The timing device of Claim 2 wherein said matrix has a thickness based on a wet film of said polymer of from 5 to 50 mil.

5. (Previously Amended) The timing device of Claim 1 wherein the matrix is attached to an adhesive tape and is adhered to a package containing a consumer product.

6. (Original) The timing device of Claim 1, wherein the redox indicator is selected from the group consisting of indigo carmine and methylene blue.

7. (Original) The timing device of Claim 1, wherein the metal ion is Sn^{2+}.

8. (Previously Amended) A method for determining when a consumer product has reached an end to its useful shelflife comprising:

preparing a timing device comprising a redox indicator deposed within a matrix which also contains a reactable metal ion, said matrix being exposable to air;

attaching the timing device to an outside surface of the consumer product;

observing the timing device for color changes, which color changes coincide with the end of the useful shelflife of the said consumer product.

EVIDENCE APPENDIX

Not Applicable